

LISTING OF CLAIMS

Claims 1-9 (canceled)

Claim 10 (Currently Amended): An autoclavable A filtration material comprising:

a saccharide coupled to a spacer; and

a matrix coupled to the spacer, the matrix being a cross-linked agarose;

wherein the spacer comprises the following formula:

$-\text{O}(\text{CH}_2)_n\text{PhNH}-$,

$-\text{O}(\text{CH}_2)_n\text{NH}-$, or

~~$-\text{N}(\text{Ac})-(\text{CH}_2)_n\text{NH}-$,~~

$-\text{N}(\text{Acetyl})-(\text{CH}_2)_n\text{NH}-$,

wherein n is an integer selected from 0, 1, 2, 3, 4, 5, 6, or 7.

Claim 11 (Previously Presented): The filtration material of claim 10, further comprising a second spacer attached to the matrix.

Claim 12 (Previously Presented): The filtration material of claim 10, wherein the matrix is bound to two or more molecules of saccharide.

Claim 13 (Previously Presented): The filtration material of claim 10, wherein the bound saccharide ranges from 0.01 to 20 mmole per liter of matrix.

Claim 14 (Previously Presented): The filtration material according to claim 10, comprising at least one of a Blood group A determinant and a Blood group B determinant bound to matrix.

Claim 15 (Previously Presented): The filtration material according claim 10, wherein the saccharide binds a pathogen.

Claim 16 (Previously Presented): The filtration material according claim 10, wherein the saccharide binds an antibody, a cancer-antigen, a toxin, a bacteria, or a virus.

Claim 17 (Canceled): The filtration material according to claim 10, wherein the matrix is a cross-linked agarose.

Claim 18 (Previously Presented): The filtration material of claim 10, wherein the spacer has the formula $-\text{CO}(\text{CH}_2)_m\text{NH}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{O}-$, and

wherein m is 1, 2, 3, 4, 5, 6, 7, or 8.

Claim 19 (Currently Amended): The filtration material of claim 10, ~~wherein the saccharide is~~ further comprising a $(\text{HOCH}_2)_3\text{C}-\text{NH}$ group linked to the spacer, and

the spacer is $-\text{CO}(\text{CH}_2)_m\text{NH}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{O}-$,

wherein m is 1, 2, 3, 4, 5, 6, 7 or 8.

Claim 20 (Withdrawn): A filtration material comprising:

a saccharide coupled to a spacer;

a matrix coupled to the spacer;
wherein the spacer comprises a saccharide, peptide, a protein, an aliphatic compound, an aromatic compound, and amino group, or a carboxyl group.

Claim 21 (Withdrawn): The filtration material of claim 20, wherein the spacer has the formula $-O(CH_2)_nPhNH-CO-(CH_2)_mNH-CH(OH)-CH_2-$,

wherein n is 0, 1, 2, 3, or 4,

wherein m is 1, 2, 3, 4, 5, 6, 7, or 8, and

wherein a reducing end of the saccharide is bound alpha or beta glycosidically to the spacer.

Claim 22 (Withdrawn): The filtration material of claim 20, wherein the spacer has the formula $-O(CH_2)_nNH-CO-(CH_2)_mNH-CH(OH)-CH_2-$,

wherein n is 0, 1, 2, 3, or 4,

wherein m is 1, 2, 3, 4, 5, 6, 7, or 8, and

wherein a reducing end of the saccharide is bound alpha or beta glycosidically to the spacer.

Claim 23 (Withdrawn): The filtration material of claim 20, wherein the matrix comprises a polymer, plastic, or a polysaccharide.

Claim 24 (Withdrawn): The filtration material of claim 20, containing two or more saccharides.

Claim 25 (Withdrawn): The filtration material of claim 20, containing two or more spacers.

Claim 26 (Withdrawn): A method of filtering a substance from a liquid comprising:
contacting the material of claim 10 with a liquid containing the substance.

Claim 27 (Withdrawn): The method according to claim 26, wherein the substance comprises an antibody, a protein, a toxin, a virus, a bacteria, a pathogen, or a cell.

Claim 28 (Withdrawn): The method of claim 26, further comprising:
eluting the substance from the material.

Claim 29 (Withdrawn): The method of claim 26, wherein the liquid is selected from the group consisting of blood, blood plasma, and a liquid from cell mediated production.

Claim 30 (New): A filtration material comprising:

a saccharide coupled to a spacer; and

a matrix coupled to the spacer;

wherein the spacer comprises the following formula:

-O(CH₂)_nPhNH-,

-O(CH₂)_nNH-, or

-N(Acetyl)-(CH₂)_nNH-,

wherein n is an integer selected from 0, 1, 2, 3, 4, 5, 6, or 7;

further wherein bound saccharide ranges from 0.01 to 20 mmole per liter of matrix.

Claim 31 (New): The filtration material of claim 10, wherein the filtration material is in the form of particles.

Claim 32 (New): The filtration material of claim 30, wherein the filtration material is in the form of particles.